

Claim 43. (Currently Amended)

C1 A composition comprising an isolated recombinant polypeptide comprising a contiguous span of at least 6 amino acids of SEQ ID NO:4, wherein the contiguous span is a truncated polypeptide sequence of the hGGPS protein sequence (SEQ ID NO:4) and wherein said contiguous span includes at least one amino acid selected from the group consisting of:

- a. a Phe residue at position 204 of SEQ ID NO:4;
- b. a Phe residue at position 295 of SEQ ID NO:4;
- c. a Cys residue at position 205 of SEQ ID NO:4; and
- d. a Pro residue at position 225 of SEQ ID NO:4.

Please add the following new claims:

Claim 69 (New).

The composition of claim 43, wherein the isolated recombinant polypeptide comprises a leader sequence, a secretory sequence, a preprotein sequence, a nickel binding polypeptide sequence, a  $\beta$ -globulin sequence, or an amino acid sequence employed for the purification of polypeptides fused to said contiguous span of amino acids.

Claim 70 (New).

C2 The composition according to claim 43, wherein said contiguous span consists essentially of 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, or 100 amino acids.

Claim 71 (New).

The composition according to claim 43, wherein said contiguous span consists of 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, or 100 amino acids.

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Docket No. G-045US02PCT  
Serial No. 09/744,527Claim 72 (New).

The composition according to claim 71, wherein said contiguous span consists of 6 amino acids.

Claim 73 (New).

The composition according to claim 71, wherein said contiguous span consists of 10 amino acids.

Claim 74 (New).

The composition according to claim 71, wherein said contiguous span consists of 20 amino acids.

Claim 75 (New).

The composition according to claim 71, wherein said contiguous span consists of 50 amino acids.

Claim 76 (New).

The composition according to claim 71, wherein said contiguous span consists of 100 amino acids.

Claim 77 (New).

The composition according to claim 43, wherein said isolated recombinant polypeptide has geranylgeranyl pyrophosphate synthetase (GGPPS) activity or wherein said isolated recombinant polypeptide specifically binds to antibodies that: 1) bind to the human GGPPS (hGGPPS), 2) a fragment of the hGGPPS protein, or 3) a contiguous span of at least 6 amino acids of the polypeptide of SEQ ID NO:4.

Claim 78 (New).

The composition according to claim 43, wherein the contiguous span comprises amino acid positions 200 through 300 of SEQ ID NO:4.

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Docket No. G-045US02PCT  
Serial No. 09/744,527Claim 79 (New).

The composition according to claim 43, wherein the contiguous span consists of amino acid positions 200 through 300 of SEQ ID NO:4.

Claim 80 (New).

A method of making a recombinant human geranylgeranyl pyrophosphate synthetase (hGGPPS) polypeptide comprising:

- a) transforming a host cell with a polynucleotide encoding a recombinant polypeptide according to claim 43; and
- b) culturing said transformed host cell under conditions conducive to the expression of the polypeptide encoded by said polynucleotide.

Claim 81 (New):

The method according to claim 80, further comprising the recovery of said polypeptide from the cultured host cell.

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